

PART V

Crops

Major Crops

Wheat is the most important crop produced in Klickitat County. During 1958 about 56,500 acres of wheat were harvested. This represented slightly over two-fifths of the harvested cropland in that year. Alfalfa cut for hay is the second major crop. Klickitat County farmers harvested 47,400 acres of alfalfa hay in 1955 which means that one out of every three harvested acre in the county produced alfalfa hay. During recent years barley has become the third ranking crop being harvested from over 13,000 acres in 1958. These three major crops account for almost 90 percent of Klickitat County's harvested cropland. Other crops of major importance are clover-timothy hay, wild hay, oats and small grains cut for hay. Tree fruits occupied 1,200 acres in 1954, while commercial vegetables were harvested from 350 acres.

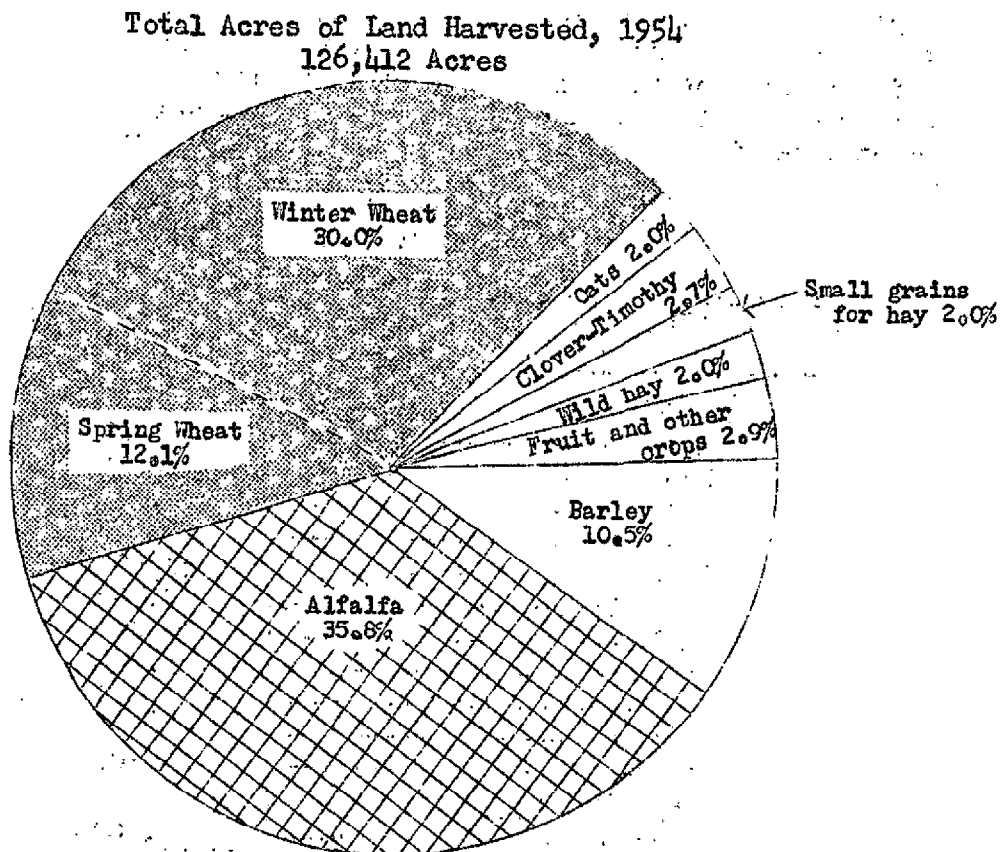


Figure 10.- Percent of Total Cropland in Leading Crops
Klickitat County, 1954
(Based on U.S. Census of Agriculture, 1954)

Crop Trends

A major trend in Klickitat County agriculture since 1939 has been the expansion of harvested cropland. Total harvested acreage in the county increased steadily from 87,800 acres in 1939 to over 126,000 acres in 1954. This expansion came mainly in wheat and alfalfa. Wheat acreage increased from 46,500 acres in 1939 to 76,400 acres by 1953. The Federal wheat acreage allotment program led to a decline of about one-third in wheat acreage after 1953. Between 1939 and 1954 alfalfa increased from 20,700 acres to 45,300 acres. Barley expanded in the early 1940's and was then reduced to a low of 1,600 acres in 1952. Three years later barley acreage was over ten times larger as wheat lands were diverted to barley under the acreage allotment program. Oats and rye increased as well as barley for the same reason. Although grains trended sharply upward in recent years, some crops have declined in importance. Small grains cut for hay dropped from 9,000 acres in 1944 to 2,600 in 1954. Fruit farming has become less widespread as the fruit orchards declined from 1,900 acres to 1,200 acres between 1939 and 1954. These trends reflect economic changes within the region and in the general market for farm products.

Wheat Farming

Wheat was the first major pioneer crop in Klickitat County and has continued as the most important. Nearly all wheat in the county is produced on drylands using the summer fallow system. Moisture is conserved in the topsoil by summer fallowing to prevent evaporation of winter precipitation. After being fallow for one crop season, topsoil accumulates sufficient moisture for a crop of wheat. Because of the moisture situation and better yields winter wheat (sown in the fall) is preferred over spring wheat.

Table 15.- Varieties of Wheat Grown
in Klickitat County, 1958

Classes and Varieties of Wheat	Production (bushels)	Percent of Total Crop
<u>White Wheats</u>		
Elmar-----	719,400	47.7
Omar-----	265,300	17.6
Elgin-----	144,000	9.5
Golden-40 Fold-----	144,000	9.5
Columbia-----	71,500	4.7
Federation-----	47,100	3.1
Marfed-----	40,000	2.6
Rex-----	32,000	2.1
Orfed-----	17,600	1.2
Triumph-----	8,900	.6
Redit-----	3,300	.2
<u>Hard-Red Winter Wheats</u>		
Turkey-----	10,000	.7
Total all classes and varieties	1,509,100	

Source: U.S.D.A., AMS, Agric. Estimates Division
State of Washington

Table 16.- Wheat and Barley: Acreage, Yield and Production
Klickitat County, 1939-1956

Year	All Wheat			Barley		
	Acreage (acres)	Yield (bushels per acre)	Production (bushels)	Acreage (acres)	Yield (bushels per acre)	Production (bushels)
1939	46,500	17.4	810,000	2,080	20.5	42,600
1940	50,000	17.5	874,000	4,300	21.0	90,300
1941	46,000	25.2	1,159,200	4,200	28.0	117,600
1942	45,000	22.0	990,000	8,400	32.0	268,800
1943	54,400	20.8	1,130,000	6,200	30.0	186,000
1944	47,400	22.7	1,074,100	4,500	27.0	121,500
1945	62,700	19.5	1,224,000	3,000	28.0	84,000
1946	66,400	23.4	1,553,000	2,650	28.0	74,200
1947	68,000	24.6	1,673,400	2,350	22.0	51,700
1948	74,000	27.0	1,995,000	2,840	26.5	75,300
1949	68,000	13.0	882,000	1,900	14.0	26,600
1950	67,000	18.3	1,226,900	9,000	25.0	225,000
1951	70,500	21.1	1,485,000	2,700	27.0	72,900
1952	76,000	23.8	1,806,000	1,600	27.0	43,200
1953	76,400	26.2	2,001,800	2,050	32.0	65,600
1954	57,300	27.2	1,556,700	13,700	27.0	370,200
1955	52,500	18.8	987,800	20,200	26.0	525,000
1956	54,300	21.4	1,161,000	18,100	29.0	525,800

Source: U.S.D.A., AMS, Agric. Estimates Division
State of Washington

Table 17.- Spring Wheat and Winter Wheat
Klickitat County, 1939-1956

Year	Spring Wheat			Winter Wheat		
	Acreage (acres)	Yield (bushels per acre)	Production (bushels)	Acreage (acres)	Yield (bushels per acre)	Production (bushels)
1939	6,600	10.7	70,500	39,900	18.5	739,500
1940	10,000	10.0	100,000	40,000	19.4	774,000
1941	5,000	26.8	134,200	41,000	25.0	1,025,000
1942	7,000	18.0	126,000	38,000	22.7	864,000
1943	23,100	20.2	467,000	31,300	21.2	663,000
1944	8,200	19.6	160,400	39,200	23.3	913,700
1945	4,000	16.0	64,000	47,700	20.0	954,000
1946	3,000	21.0	63,000	60,400	23.5	1,419,400
1947	3,800	18.0	68,400	64,200	25.0	1,605,000
1948	9,000	18.0	162,000	65,000	28.2	1,833,000
1949	12,000	10.5	126,000	56,000	13.5	756,000
1950	21,000	17.9	375,900	46,000	18.5	851,000
1951	23,000	15.0	345,000	47,500	24.0	1,140,000
1952	18,000	23.0	414,000	58,000	24.0	1,392,000
1953	24,400	24.5	597,800	52,000	27.0	1,404,000
1954	16,000	25.0	400,000	42,400	27.0	1,144,800
1955	15,200	11.0	167,200	37,300	22.0	820,600
1956	12,500	26.0	325,000	41,800	20.0	836,000

Source: U.S.D.A., AMS, Agric. Estimates Division
State of Washington

Over 210 farms specialized in wheat in 1954. Most of the wheat is grown in the Horse Heaven Hills plateau and the farms are generally large in order to make efficient use of machinery. Acreage increased from about 46,000 acres in 1939 to over 76,000 in 1954. In 1954, the first year of operation of the U. S. Department of Agriculture wheat acreage allotment program, acreage was decreased to 57,000 acres. A peak in wheat production of 2,002,000 bushels was recorded in 1953. Variations in climatic conditions in Horse Heaven Hills and fertilization practices have resulted in yields ranging from a low of 13 bushels per acre in 1949 to nearly 28 bushels per acre in 1958. Some extremely dry years have resulted in the abandonment of marginal wheat lands.

Klickitat growers have experimented with many varieties of wheat in an effort to increase yield. During 1958 common white wheats accounted for two-thirds of the total crop. Elmar and Omar were first and second, respectively, among the wheat varieties grown in the county although Omar is a new variety. Elgin and Golden were tied for third with Columbia, another new variety, in fifth place. Most of the wheat grown in white wheat with only a little being hard-red winter wheat. Marked shifts in varieties grown have characterized recent years.

Barley, Oats and Rye

During recent years barley has become the second ranking grain crop. Before 1954 barley acreage ranged from a low of 1,600 acres in 1952 to a high of 9,000 acres in 1950. With the beginning of the Federal wheat acreage allotment

Table 18.- Oats and Rye: Acreage, Yield and Production
Klickitat County, 1939-1956

Year	Oats (grain)			Rye (for grain)		
	Acreage (acres)	Yield (bushels per acre)	Production (bushels)	Acreage (acres)	Yield (bushels per acre)	Production (bushels)
1939	1,200	34.0	40,800	320	9.4	3,000
1940	1,490	34.0	50,700	330	11.5	3,800
1941	1,160	41.0	47,600	340	13.5	4,600
1942	1,450	36.0	52,200	280	9.0	2,520
1943	1,320	45.0	59,400	130	11.0	1,430
1944	1,430	51.0	72,880	70	15.7	1,100
1945	1,460	52.0	75,920	90	14.4	1,300
1946	1,440	50.5	72,740	60	14.7	880
1947	1,330	47.0	62,500	70	11.0	770
1948	1,800	44.0	79,200	100	14.0	1,400
1949	1,230	40.0	49,200	130	10.0	1,300
1950	1,700	43.0	73,100	250	7.0	1,750
1951	1,800	44.0	79,200	200	10.0	2,000
1952	1,900	37.5	71,300	140	7.0	980
1953	2,240	41.0	91,800	200	7.6	1,510
1954	2,700	36.0	97,200	240	18.0	4,320
1955	2,000	39.5	79,000	280	8.9	2,500
1956	2,700	19.0	51,300	640	20.0	12,800

Source: U.S.D.A., AMS, Agric. Estimates Divn.
State of Washington

program in 1954 a considerable amount of wheat land was diverted to barley and over 20,000 acres of barley were grown by 1955 with 27,000 acres reported in 1957. Barley yields have varied from 14 bushels per acre in 1949 to 32 bushels per acre in 1953. About 200 farms now produce barley and prior to 1954 barley was grown principally for home feed use.

Oats are a popular feed grain. Acreage in oats fluctuated mostly between 1,200 and 1,500 acres per year prior to 1954. About one-half of the annual crop is used on the farms where it was grown. Over 100 farms have been producing oats in recent years. Some wheat land in recent years has been diverted to oats and about 2,700 acres of oats were grown during 1956. Yields have ranged from a high of 52 bushels per acre in 1945 to a low of 19 bushels per acre in 1956.

Rye is a minor grain crop in Klickitat County. Acreage devoted to rye averaged about 300 acres per year prior to 1943. Thereafter, about 200 acres of rye were grown each year. Some farmers have experimented with rye on diverted wheat lands and over 600 acres were grown in 1956. The average yield of 20 bushels per acre in 1956 was the peak yield with the low being 7 bushels per acre in 1950.

Alfalfa, Other Hay Crops and Silage

Commercial hay production is an important part of Klickitat County agriculture and the Goldendale area is noted for high quality alfalfa which is marketed widely over western Washington. The county ranks fourth in state alfalfa production. Total hay acreage has been over 50,000 acres since the early 1940's. The Census total of 55,400 acres in 1954 was the largest reported to that date. Alfalfa is the leading hay crop and the second most important crop in the county. Alfalfa acreage increased from 20,700 acres to 45,300 acres between 1939 and 1954. About 3,000 acres of alfalfa were irrigated in 1954. In 1954 about one-half of the crop was sold from the farms where it was produced.

Until recent years the second major hay crop was small grains cut for hay. Almost 9,000 acres of small grains were cut for hay in both 1939 and 1944. There was a rapid decline in the acreage grain hay after 1945 and only 2,600 acres were reported in 1954.

Clover and timothy and wild hay are important in the county. The peak acreage of clover-timothy was reached about 1945 with 3,900 acres reported while in 1954 about 3,500 acres were harvested. Most of this total came from irrigated lands. Very little clover and timothy hay is produced for sale which is true of all hay crops except alfalfa. Wild hay is produced on several farms with slightly less than 3,000 acres cut each year.

During recent years there has been a sharp increase in the practice of making silage. Between 1949 and 1954 the number of farms making silage increased from 2 to 9 with the acreage devoted to production increasing from 29 to 160 during the same period.

Table 19.- Clover-Timothy Hay and Alfalfa Hay
Acreage, Yield and Production
Klickitat County, 1939-1955

Year	Clover and Timothy Hay			Alfalfa Hay		
	Acreage (acres)	Yield (tons per acre)	Production (tons)	Acreage (acres)	Yield (tons per acre)	Production (tons)
1939	2,900	1.6	4,700	21,000	.9	18,900
1940	2,600	1.4	3,700	24,300	1.4	33,100
1941	3,200	1.5	4,800	26,600	1.2	31,900
1942	3,400	1.4	4,900	30,900	1.4	43,300
1943	3,600	1.1	4,000	34,400	1.1	37,800
1944	3,900	1.4	5,600	39,600	.9	35,600
1945	4,300	1.5	6,600	40,300	1.1	45,300
1946	4,000	1.7	6,700	42,400	1.2	51,000
1947	3,900	1.6	6,300	43,500	1.0	44,500
1948	3,800	1.9	7,100	39,600	1.3	50,400
1949	3,700	1.6	5,900	47,500	.9	43,000
1950	3,900	1.8	7,000	42,700	1.1	47,000
1951	4,200	1.3	5,400	48,000	1.0	48,400
1952	3,900	2.9	7,700	46,100	1.1	51,000
1953	3,700	1.5	5,560	46,800	1.3	61,900
1954	3,500	1.8	6,300	46,300	1.2	56,500
1955	3,700	1.2	4,400	47,400	.8	35,900

Source: U.S.D.A., AMS, Agric. Estimates Division
State of Washington

Vegetables

Production of commercial vegetables is a minor enterprise in the lower valley lands of southwestern Klickitat County. About 20 farms produced vegetables for sale in 1954 while 380 grew vegetables for home use. In 1954, a total of 330 acres of commercial vegetables were produced compared with 450 acres in 1949.

A variety of vegetable crops are produced in the county but tomatoes are the most important. During 1954, 35 acres of tomatoes were grown and the largest acreage recorded was 100 in 1949. Eight to ten farms produced tomatoes commercially during the 1940's. Klickitat County ranked third among Washington counties in tomato production during 1954 and 1955. Lettuce is another important vegetable crop and during recent years 20 to 25 acres of lettuce have been produced each year. Cabbage was more popular than lettuce until about 1954. Thirty acres of cabbage were produced in 1954, but only 10 in 1957. Snap beans were the fourth major vegetable until 1955. Less than five acres of snap beans per year have been grown since then. Klickitat ranked third in tomato production during crop years of 1954 and 1955. About 8 to 10 farms were growing tomatoes commercially in the 1940's. Sales of vegetables totaled \$187,000 in 1954.

Table 20.- Vegetable Crops: Tomatoes, Lettuce, Snap Beans and Cabbage, Klickitat County

Year	Tomatoes		Lettuce		Snap Beans		Cabbage	
	Acres	Tons	Acres	Tons	Acres	Tons	Acres	Tons
1939	92	450	NA	NA	28	120	26	130
1944	39	160	NA	NA	48	200	16	75
1949	100	300	18	60	56	220	49	245
1950	NA	NA	NA	NA	NA	NA	NA	NA
1951	40	160	20	50	30	130	40	220
1952	40	140	25	90	40	140	60	300
1953	60	180	25	110	30	120	50	250
1954	35	110	20	70	25	100	30	250
1955	50	250	25	225	1/	1/	25	200
1956	70	420	20	100	1/	1/	25	200
1957	40	180	15	90	1/	1/	10	80

NA - not available. 1/ Under 5 acres.

Sources: U.S. Censuses of Agriculture, 1939-1954
U.S.D.A., AMS, Agric. Estimates, 1951-1957Table 21.- Corn and Potatoes: Acreage, Yield and Production
Klickitat County, 1939-1955

Year	Corn			Potatoes		
	Acreage (acres)	Yield (bushels per acre)	Production (bushels)	Acreage (acres)	Yield (tons per acre)	Production (tons)
1939	20	17.0	340	55	4.0	220
1940	10	40.0	400	NA	NA	NA
1941	10	11.0	110	NA	NA	NA
1942	NA	NA	NA	NA	NA	NA
1943	20	12.0	240	NA	NA	NA
1944	20	29.0	580	44	4.1	180
1945	20	32.0	640	NA	NA	NA
1946	10	35.0	350	NA	NA	NA
1947	10	34.0	340	NA	NA	NA
1948	10	36.0	360	NA	NA	NA
1949	10	18.0	180	21	4.7	95
1950	10	21.0	210	NA	NA	NA
1951	10	20.0	200	40	4.0	160
1952	10	26.0	260	25	4.9	125
1953	10	22.0	220	25	4.8	120
1954	10	14.0	140	10	9.5	95
1955	10	25.0	250	5	8.1	45

NA - not available.

Sources: U. S. Census of Agriculture
U.S.D.A., AMS, Agric. Estimates
Division, 1940-1955

Tree Fruits, Grapes and Nuts

Tree fruits are an important crop enterprise along the Columbia River shoreline and in the White Salmon and Klickitat Valleys. Fruit sales returned \$926,000 to Klickitat County farmers in 1954 which represented almost one-fifth of the total income from crops. Only 130 of the county's 1,200 acres of orchard land are under irrigation. Pears are the leading fruit crop and Klickitat is the third ranking pear producing county in Washington. The number of bearing pear trees in the county has remained fairly constant over the last 20 years with about 23,400 bearing pear trees reported in 1954.

The second ranking fruit crop is apples. In 1954 over 10,600 bearing trees were reported. Apple tree numbers have been declining since about 1920. Between 1910 and 1920 interest in apple production was very high and over 236,000 bearing apple trees were reported in 1920. The decline during the decade following 1920 was very rapid and the reduction in tree numbers did not really slow down until after 1950.

Peaches are another important fruit crop of the region. Bearing peach trees totaled 7,200 in 1954. The number of bearing peach trees increased by one-fifth between 1949 and 1954. Cherries are the other major tree fruit crop. Almost 6,000 cherry trees were reported in 1954 and production almost equaled that of peaches in 1954.

Apricots, prunes and plums are minor tree crops. These three fruits were reduced after 1920 and replaced with more profitable species such as pears. Prunes and plums are of virtually no commercial importance.

Table 22.- Bearing Fruit Trees
Klickitat County, 1890-1954

Year	Numbers of Bearing Trees					
	Apples	Apricots	Cherries	Peaches	Pears	Prunes & Plums
1890	12,787	396	692	19,700	2,330	6,007
1900	62,108	1,120	2,552	17,541	4,785	22,239
1910	50,548	479	4,645	8,002	4,773	7,510
1920	236,602	9,905	5,052	17,944	23,532	2,547
1930	89,506	1,849	6,803	5,113	7,015	1,569
1940	39,335	2,065	8,194	6,878	25,194	1,539
1950	13,068	1,994	8,256	6,134	20,529	232
1954 ^{1/}	10,619	2,256	5,901	7,223	23,398	399

^{1/} 1954 figures are for trees in orchards of 20 trees or more.

Sources: Washington Tree Fruits, Washington Crop and Livestock Reporting Service, USDA and Wash. State Dept. of Agric., Cooperating, 1952. U. S. Census of Agriculture.

Thirty-four farms had over 20 grape vines each in 1954. Of a total of 12,000 vines only 4,000 were of bearing age. Production of grapes totaled 29,000 pounds. Twenty-seven farms reported a total of 270 walnut trees in 1954 and about 3,000 pounds of walnuts were produced.